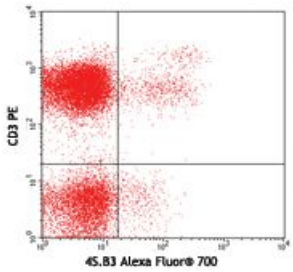
SONY

Product Data Sheet

Alexa Fluor® 700 anti-human IFN-γ

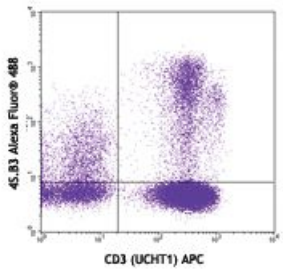
Catalog # / Size:	3112600 / 100 µg 3112595 / 25 µg
Clone:	4S.B3
Isotype:	Mouse IgG1, κ
Immunogen:	Partially purified, native human IFN-γ
Reactivity:	Human, Non-human primate, Other
Preparation:	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Workshop Number:	VI C-7
Concentration:	0.5



PMA+ionomycin-stimulated (5 hours) human PBMCs surface stained with CD3 PE and intracellular stained with 4S.B3 Alexa Fluor® 700

Applications:

Applications:	Intracellular Staining for Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.5 µg per million cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.



PMA/ionomycin-stimulated (6 hours) human peripheral blood lymphocytes stained with 4S.B3 Alexa Fluor® 488 and CD3 (UCHT1) APC

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Application Notes:

Other or ELISPOT Detection5: The biotinylated 4S.B3 antibody is useful as a detection antibody for a sandwich Other or ELISPOT assay, when used in conjunction with purified NIB42 antibody (Cat. No. 502402/502404) or purified MD-1 antibody (Cat. No. 507502/507513) as the capture antibody.

Flow Cytometry[3,4,6-8]: The fluorochrome-labeled 4S.B3 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IFN-γ -producing cells within mixed cell populations.

Additional reported applications (for the relevant formats) include: neutralization[1,2], Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponin-treated tissue sections, and immunocytochemistry. The 4S.B3 antibody can neutralize the bioactivity of natural or recombinant IFN-γ.

Note: For testing human IFN-γ in serum or plasma, Other MAX™ Sets (Cat. No. 430101 to 430106) are specially developed and recommended.

Application References:

1. Meager A, *et al.* 1984. *J. Interferon Res.* 4:619. (Neut)
2. Meager A, 1987. *Lymphokines and Interferons:A Practical Approach*. IRL Press Ltd, Oxford, p. 105. (Neut)
3. Sester M, *et al.* 2002. *J. Virol.* 76:3748. (ICFC)
4. Infante-Duarte C, *et al.* 2000 *J. Immunol.* 165:6107. (ICFC)
5. Goodier M, *et al.* 2000. *J. Immunol.* 165:139. (Other)
6. Chen H, *et al.* 2005. *J. Immunol.* 175:591. (ICFC)
7. Smeltz RB, 2007. *J. Immunol.* 178:4786. (ICFC)
8. Iwamoto S, *et al.* 2007. *J. Immunol.* 179:1449. (ICFC) PubMed
9. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (ICFC)
10. Chow IT, *et al.* 2014. *PLoS One.* 9:112882. PubMed

Description:

Interferon-γ is a potent multifunctional cytokine which is secreted primarily by activated NK cells and T cells. Originally characterized based on anti-viral activities, IFN-γ also exerts anti-proliferative, immunoregulatory, and proinflammatory activities. IFN-γ can upregulate MHC class I and II antigen expression by antigen-presenting cells.

Antigen References:

1. Fitzgerald K, *et al.* Eds. 2001. The Cytokine FactsBook. Academic Press, San Diego.
2. De Maeyer E, *et al.* 1992. *Curr. Opin. Immunol.* 4:321.
3. Farrar M, *et al.* 1993. *Annu. Rev. Immunol.* 11:571.
4. Gray P, *et al.* 1987. *Lymphokines* 13:151.

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